

Supercomputing & python workshops quick links

0 Getting an account on the supercomputer

The supercomputer is available for free for Faculty and their students. To request an account, fill out the following form: <https://links.asu.edu/getHPC>. Faculty should list themselves as their own sponsor. Students, list your Faculty mentor. Your account should be created within one business day.

1 Connecting to the Sol supercomputer

Once an account is created, you may access the Sol supercomputer from either your web browser or command-line interface shell.

1.0 The VPN

If you are off-campus (or on some parts of campus, like Hayden library), you will need to first connect to the virtual private network (VPN), as detailed here: <https://sslvpn.asu.edu>.

1.1 Browser connections — the web portal

To connect via the browser, go to <https://sol.asu.edu>. You will be prompted to authenticate as if you were signing into your MyASU.

1.2 Command-line interface connections — the shell

For shell-based connections, run,

```
1 ssh <asurite>@sol.asu.edu
```

where <asurite> should be replaced by your ASURITE, i.e., the username you sign into MyASU with. If connecting for the first time, your terminal will ask you to verify the host that you are connecting to, and then prompt you for your password (which is the password you use to sign into MyASU).

2 Launching a Jupyter Server

This is only accessible through the web interface (see subsection 1.1). From the web portal's home page, scroll to the top of the screen to find the navigation bar (in ASU Gold). With your mouse, select the dropdown "Interactive Apps." From the list, select, "Jupyter." A new view will populate, which looks like a form for submitting a Jupyter Lab server.

Set the partition to "lightwork," the QOS to "public," the CPU core allocation to 1, the memory allocation to 2, and Jupyter wall time to "0-2" (shorthand for 0 days 2 hours). The other settings should be left in their defaults (for instance, leave the GPU field blank).

Once the form is filled, click "Launch," and wait for the session to start on the new page. Once the session is ready, click "Connect to Jupyter."

3 Accessing the workshop materials

The workshop materials are available on github, i.e., <https://github.com/jyalim/RCWorkshops>. From the Jupyter interface (see section 2), scroll to the bottom of the “Launcher” view and click on the “Terminal” tile to open a command-line interface shell.

Once the shell is open, run the following commands:

```
1 mkdir Desktop
2 cd Desktop
3 git clone https://github.com/jyalim/RCWorkshops
```

4 Additional Help

Our regular academic semester office hours are every Tuesday and Wednesday over zoom from 1–3:30 PM. See the green box on our home page (<https://links.asu.edu/docs>) for the zoom link and schedule details.

For documentation on creating Python environments, see <https://links.asu.edu/mamba>. We are happy to demonstrate or help in office hours.

5 Extracurricular

Interested in the student chapter of the Women in High-Performance Computing (WHPC)? Please fill out the following interest form: <https://forms.gle/hjwsxKx21LQQYQhX9>. Also subscribe to the club on SunDevil Sync, ASU’s official centralized resource for ASU clubs: <https://links.asu.edu/whpc>.